

Skin-to-skin (STS) care, in which a baby is held directly against a caregiver's bare chest, has health benefits. However, preterm newborns born before 32 weeks of gestation commonly do not receive STS in the first two weeks within the neonatal intensive care unit (NICU). Research suggests that early STS reduces adverse outcomes such as life-threatening sepsis and mortality within low-income countries. Yet, evidence demonstrating the importance of early STS within high-resourced NICUs is limited. To develop evidence-based guidelines for NICU care, the relationship between first STS time and adverse outcomes must be examined. We hypothesize that earlier STS is associated with lower rates of sepsis and mortality. To investigate, we conducted a retrospective study of very preterm neonates admitted to a level III NICU in Washington state. Newborns were categorized into three groups based on first STS time: (1) 72 hours of birth, (2) 72 hours and 7 days, (3) no STS within 7 days. Rates of culture-positive sepsis and mortality between groups were compared while assessing associations with potential confounding variables including gestational age, birth weight, and fluid intake. Preliminary findings suggest associations between first STS time and outcomes of sepsis and mortality, although potential bias from confounding factors require future multivariate models accounting for impact on outcomes. Thus, we plan to evaluate the impact of STS on newborn outcomes among other sites, expanding the sample size and generalizability of future findings. Ultimately, research on STS care helps improve hospital documentation policies, neonatal care guidelines, and neonatal health outcomes.